

Amendments to and Listing of the Claims:

1. to 22. (Canceled)

23. (Original) A kit for amplifying a portion of a human *FEZ1* gene, the kit comprising a first isolated polynucleotide and a second isolated polynucleotide, wherein the first isolated polynucleotide comprises a portion which anneals with high stringency with at least twenty consecutive nucleotide residues of the coding strand of SEQ ID NO: 1, and wherein the second isolated polynucleotide comprises a portion which anneals with high stringency with at least twenty consecutive nucleotide residues of the non-coding strand of SEQ ID NO: 1.

24. (Original) A kit for amplifying a portion of a cDNA generated from a transcript of a human *FEZ1* gene, the kit comprising a first isolated polynucleotide and a second isolated polynucleotide, wherein a portion of the first isolated polynucleotide anneals with high stringency with at least twenty consecutive nucleotide residues of the coding strand of SEQ ID NO: 1, and wherein a portion of the second isolated polynucleotide anneals with high stringency with at least twenty consecutive nucleotide residues of the non-coding strand of SEQ ID NO: 1.

25. to 99. (Canceled)

100. (Previously Presented) An isolated polynucleotide having a sequence comprising at least twenty consecutive nucleotide residues of a portion of a strand of SEQ ID NO: 1, wherein the portion includes a residue selected from the group consisting of residues 1 to 423, residues 871 to 4343, residues 4365 to 4419, residues 4451 to 4473, residues 4514 to 6917, residues 6939 to 7125, residues 7148 to 7633, and residues 7806 to 8520 of SEQ ID NO: 1.

101. (Previously Presented) The polynucleotide of claim 100, wherein the sequence comprises at least fifty consecutive residues of the portion of the strand of SEQ ID NO: 1.

102. (Previously Presented) The polynucleotide of claim 100, wherein the sequence comprises at least one hundred consecutive residues of the portion of the strand of SEQ ID NO: 1.

103. (Previously Presented) The polynucleotide of claim 100, wherein the sequence comprises residues 112-456, 1707-2510, and 4912-5550 of SEQ ID NO: 1.

104. (Previously Presented) The polynucleotide of claim 100, wherein the sequence comprises a strand of SEQ ID NO: 3.

105. (Previously Presented) The polynucleotide of claim 104, wherein the polynucleotide further comprises a promoter operably linked with SEQ ID NO: 3.

106. (Previously Presented) The polynucleotide of claim 105, wherein the promoter is a constitutive promoter.

107. (Previously Presented) The polynucleotide of claim 105, wherein the promoter is an inducible promoter.

108. (Previously Presented) The polynucleotide of claim 105, wherein the promoter is a tissue-specific promoter.

109. (Previously Presented) The polynucleotide of claim 105, wherein the polynucleotide is incorporated in a nucleic acid vector.

110. (Previously Presented) The polynucleotide of claim 100, wherein the polynucleotide is incorporated in a nucleic acid vector.

111. (Previously Presented) The polynucleotide of claim 100, wherein the polynucleotide is detectably labeled.

112. (Previously Presented) The polynucleotide of claim 111, wherein the detectably-labeled polynucleotide is selected from the group consisting of a polynucleotide linked to a protein of a protein-ligand pair, a polynucleotide linked to a ligand of a protein-ligand pair, a biotinylated polynucleotide, a polynucleotide linked to an enzyme, and a radio-labeled polynucleotide.

113. (Previously Presented) The polynucleotide of claim 112, wherein the polynucleotide is a polynucleotide immobilized on the surface of a gene chip.

114. (Previously Presented) The polynucleotide of claim 100, wherein the polynucleotide is substantially purified.

115. (Previously Presented) The polynucleotide of claim 100, wherein at least two nucleotide residues of the polynucleotide are linked by a non-naturally occurring linkage.

116. (Previously Presented) The polynucleotide of claim 115, wherein the non-naturally occurring linkage is selected from the group consisting of phosphonate, phosphorothioate, phosphorodithioate, phosphoramidate methoxyethyl phosphoramidate, formacetal, thioformacetal, diisopropylsilyl, acetamidate, carbamate, dimethylene-sulfide (-CH₂-S-CH₂), dimethylene-sulfoxide (-CH₂-SO-CH₂), dimethylene-sulfone (-CH₂-SO₂-CH₂), 2'-O-alkyl, and 2'-deoxy-2'-fluoro phosphorothioate, phosphotriester, siloxane, carbonate, carboxymethyl ester, acetamidate, thioether, bridged phosphoramidate, bridged methylene phosphonate, bridged phosphoramidate, bridged phosphoramidate, bridged methylene phosphonate, phosphorothioate, methylphosphonate, phosphorodithioate, bridged phosphorothioate, and bridged sulfone linkages.

117. (Previously Presented) The polynucleotide of claim 100, wherein an end of the polynucleotide is nucleolytically blocked.

118. (Previously Presented) A pharmaceutical composition comprising an isolated polynucleotide of claim 100 and a pharmaceutically acceptable carrier.

128. (Previously Presented) The polynucleotide of claim 127, wherein the polynucleotide further comprises a promoter operably linked with SEQ ID NO: 3.

129. (Previously Presented) The polynucleotide of claim 128, wherein the promoter is a constitutive promoter.

130. (Previously Presented) The polynucleotide of claim 128, wherein the promoter is an inducible promoter.

131. (Previously Presented) The polynucleotide of claim 128, wherein the promoter is a tissue-specific promoter.

132. (Previously Presented) The polynucleotide of claim 128, wherein the polynucleotide is incorporated in a nucleic acid vector.

133. (Previously Presented) The polynucleotide of claim 123, wherein the polynucleotide is incorporated in a nucleic acid vector.

134. (Previously Presented) The polynucleotide of claim 123, wherein the polynucleotide is detectably labeled.

135. (Previously Presented) The polynucleotide of claim 134, wherein the detectably-labeled polynucleotide is selected from the group consisting of a polynucleotide linked to a protein of a protein-ligand pair, a polynucleotide linked to a ligand of a protein-ligand pair, a biotinylated polynucleotide, a polynucleotide linked to an enzyme, and a radio-labeled polynucleotide.

136. (Previously Presented) The polynucleotide of claim 123, wherein the polynucleotide is a polynucleotide immobilized on the surface of a gene chip.

119. (Previously Presented) A pharmaceutical composition comprising an isolated polynucleotide of claim 103 and a pharmaceutically acceptable carrier.

120. (Currently Amended) An isolated animal cell comprising an exogenous isolated polynucleotide of claim 100.

121. (Currently Amended) An isolated animal cell comprising an exogenous isolated polynucleotide of claim 103.

122. (Previously Presented) A kit for amplifying a portion of a human *FEZ1* gene, the kit comprising an isolated polynucleotide of claim 100 and a second polynucleotide that is homologous with a portion of the opposite strand of SEQ ID NO: 1.

123. (Previously Presented) An isolated polynucleotide having a sequence that is substantially homologous with twenty consecutive nucleotide residues of a portion of at least one strand of SEQ ID NO: 1, wherein the portion is selected from the group consisting of residues 1 to 423, residues 871 to 4343, residues 4365 to 4419, residues 4451 to 4473, residues 4514 to 6917, residues 6939 to 7125, residues 7148 to 7633, and residues 7806 to 8520 of SEQ ID NO: 1.

124. (Previously Presented) The polynucleotide of claim 123, wherein the sequence is substantially homologous with fifty consecutive residues of the portion.

125. (Previously Presented) The polynucleotide of claim 123, wherein the sequence is substantially homologous with one hundred consecutive residues of the portion.

126. (Previously Presented) The polynucleotide of claim 123, wherein the sequence comprises residues 112-456, 1707-2510, and 4912-5550 of SEQ ID NO: 1.

127. (Previously Presented) The polynucleotide of claim 123, wherein the sequence comprises a strand of SEQ ID NO: 3.

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137. (Previously Presented) The polynucleotide of claim 123, wherein the polynucleotide is substantially purified.

138. (Previously Presented) The polynucleotide of claim 123, wherein at least two nucleotide residues of the polynucleotide are linked by a non-naturally occurring linkage.

139. (Previously Presented) The polynucleotide of claim 138, wherein the non-naturally occurring linkage is selected from the group consisting of phosphonate, phosphorothioate, phosphorodithioate, phosphoramidate methoxyethyl phosphoramidate, formacetal, thioformacetal, diisopropylsilyl, acetamidate, carbamate, dimethylene-sulfide (-CH₂-S-CH₂), dimethylene-sulfoxide (-CH₂-SO-CH₂), dimethylene-sulfone (-CH₂-SO₂-CH₂), 2'-O-alkyl, and 2'-deoxy-2'-fluoro phosphorothioate, phosphotriester, siloxane, carbonate, carboxymethyl ester, acetamidate, thioether, bridged phosphoramidate, bridged methylene phosphonate, bridged phosphoramidate, bridged phosphoramidate, bridged methylene phosphonate, phosphorothioate, methylphosphonate, phosphorodithioate, bridged phosphorothioate, and bridged sulfone linkages.

140. (Previously Presented) The polynucleotide of claim 123, wherein an end of the polynucleotide is nucleolytically blocked.

141. (Previously Presented) A pharmaceutical composition comprising an isolated polynucleotide of claim 123 and a pharmaceutically acceptable carrier.

142. (Currently Amended) An isolated animal cell comprising an exogenous isolated polynucleotide of claim 123.

143. (Previously Presented) A kit for amplifying a portion of a human *FEZ1* gene, the kit comprising an isolated polynucleotide of claim 123 and a second polynucleotide that is homologous with a portion of the opposite strand of SEQ ID NO: 1.

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144. (Previously Presented) A kit for selecting an anti-cancer therapeutic compound for administration to a human afflicted with a cancer, the kit comprising a plurality of candidate anti-cancer therapeutic compounds and a reagent for assessing expression of *FEZ1* in a cell, wherein the reagent comprises a polynucleotide.

145. (New) An isolated polynucleotide having a sequence comprising at least twenty consecutive nucleotide residues of a portion of SEQ ID NO: 1, wherein the portion is selected from residues 1701 to 2510 and residues 4912 to 5550.

146. (New) An isolated polynucleotide having a sequence comprising at least twenty consecutive nucleotide residues of a strand of SEQ ID NO: 1, wherein the sequence encodes a polypeptide that binds a fragment selected from the group consisting of a fragment of tubulin or a fragment of a peptidomimetic of tubulin.

147. (New) The polynucleotide of claim 146, wherein the sequence comprises at least fifty consecutive residues.

148. (New) The polynucleotide of claim 146, wherein the sequence comprises at least one hundred consecutive residues.

149. (New) The polynucleotide of claim 146, wherein the sequence comprises a strand of SEQ ID NO: 3.

150. (New) An isolated polynucleotide having a sequence comprising at least twenty consecutive nucleotide residues of a strand of SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that binds a fragment selected from the group consisting of a fragment of EF1- γ , and a peptidomimetic of a fragment of EF1- γ .

151. (New) The polynucleotide of claim 149, wherein the sequence comprises at least fifty consecutive residues.

152. (New) The polynucleotide of claim 149, wherein the sequence comprises at least one hundred consecutive residues.

153. (New) The polynucleotide of claim 149, wherein the sequence comprises a strand of SEQ ID NO: 3.

154. (New) An isolated polynucleotide having a sequence comprising at least twenty consecutive nucleotide residues of a strand of SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that inhibits cell proliferation.

155. (New) An isolated polynucleotide having a sequence comprising at least twenty consecutive nucleotide residues of a strand of SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that inhibits tubulin polymerization.

156. (New) An isolated polynucleotide having a sequence that anneals under conditions of high stringency with SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that binds a fragment selected from the group consisting of a fragment of EF1- γ , and a peptidomimetic of a fragment of EF1- γ .

157. (New) An isolated polynucleotide having a sequence that anneals under conditions of high stringency with SEQ ID NO: 1, wherein the polynucleotide encodes a polypeptide that binds a fragment selected from the group consisting of a fragment of EF1- γ , and a peptidomimetic of a fragment of EF1- γ .